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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,250	03/22/2004	Satoru Yoneda	204552032500	8947

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EXAMINER	
REIS, TRAVIS M	

ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/805,250	YONEDA ET AL.	
	Examiner	Art Unit	
	Travis M. Reis	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 November 2005* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

In line 4, after "wherein" ---a---should be inserted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5-8, & 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Yura et al. (U.S. Patent 6795678).

Yura et al. discloses a belt-type fixing device (14) in Figure 4 comprising a continuous, metal or resin, a one-piece nip forming member (19) that is fixed inside an endless-sheet-like fixing belt (15) to be heated by a rotatable heating roller (16) in a position away from the nip forming member, so as to be incapable of rotating, and a rotatable pressurizing member with an elastic layer (17) and a thickness of 5 mm & a hardness of 20-40 on the Asker C scale, with the fixing belt interposed between, wherein a contact part between the fixing belt and the pressurizing roller forms a fixing nip (L1), the fixing nip being formed only by the nip forming member, and a surface of the nip forming member that is opposite to the pressuring member is configured as a curved surface (L10) extending along an outer circumferential surface of the pressurizing roller so that a pressure distribution in the fixing nip is made generally flat with respect to a paper feeding direction (S); and when the pressurizing roller rotates, the belt

member follows; and further wherein the radius, and mean radius, of the curvature of the curved surface of the nip and the radius of the pressurizing layer meets the equation r2 < r1 < r2 K.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3, 4, & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yura et al.

With reference to claims 3 & 4, Yura et al. discloses all of the instant claimed invention as stated above in the rejection of claims 1, 2, 5-8, & 10-15 but does not disclose that the nip forming member causes a radial strain of not less than 0.3 mm in the elastic layer of the pressurizing roller with a mean pressure not less than 80 kPa; or that the thermal conductivity of the elastic layer is 0.3 W/(m K) or less. However, to choose a radial strain of not less than 0.3 mm or thermal conductivity of 0.3 W/(m K) or less in the elastic layer & a mean pressure not less than 80 kPa, absent any criticality, is only considered to be the " optimum " values of the elastic layer properties, as stated above, that a person having ordinary skill in the art would have

been able to determine using routine experimentation based, among other things, on the desired accuracy and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. See ***In re Boesch***, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the elastic layer disclosed by Yura et al. have a thermal conductivity of 0.3 W/(m K) or a radial strain of 0.3 mm with a mean pressure 80 kPa in order to be durable.

With reference to claim 9, Yura et al. discloses all of the instant claimed invention as stated above in the rejection of claims 1, 2, 5-8, & 10-15 but does not disclose a mean pressure in the fixing nip between 50 kPa to 250 kPa. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a fixing nip having a mean pressure in the range of 50 kPa to 250 kPa, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. ***In re Aller***, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to provide the fixing nip disclosed by Yura et al. to have a mean pressure in the range of 50 kPa to 250 kPa in order that the paper remain in place while the toner is fixed.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-5, 10-12, & 14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 6, & 7 of copending Application No. 10/805221. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations claimed in claims 1, 2, 5, 10-12, & 14 of this application are present in claims 1, 2, 5, 6, & 7 of Application No. 10/805221.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1, 2, 10-12, & 14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6, 8-10 of copending Application No. 10/805228. Although the conflicting claims are not identical, they are not patentably distinct from each other because tall the limitations claimed in claims 1, 2, 10-12, & 14 of this application are present in claims 1, 2, 4, 6, 8-10 of Application No. 10/805228.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1, 2, 5, 8, 10-12, 14, & 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5-8, 10-12 of copending Application No. 10/805244. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations claimed in claims 1, 2, 5, 8, 10-12, 14, & 15 of this application are present in claims 1, 2, 5-8, 10-12 of Application No. 10/805244.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 6, 7, 9, & 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 & 6 of copending Application No. 10/805221 in view of Yura et al. (U.S. Patent 6795678). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3, 6, 7, 9, & 13 claim a device as stated in claims 1 & 6 of copending Application No. 10/805221 with the exception of radii of curvature meet the equations r2 < r1 < r2 K or a mean pressure of a range between 50 kPa and 250 kPa.

Yura et al. discloses an image forming apparatus that can be in said range and meet said equation. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the device claimed in claims 1 & 6 of copending Application No. 10/805221 with the range and distance as taught by Yura et al. in order to allow papers of different thickness into the nip and be durable.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 3, 6, 7, 9, & 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, & 9 of copending Application No. 10/805228 in view of Yura et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3, 6, 7, 9, & 13 claim a device as stated in claims 1, 6, & 9 of copending Application No. 10/805228 with the exception of radii of curvature meet the equations r2 < r1 < r2 K or a mean pressure of a range between 50 kPa and 250 kPa.

Yura et al. discloses an image forming apparatus that can be in said range and meet said equation Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the device claimed in claims 1, 6, & 9 of copending Application No. 10/805228 with the range and distance as taught by Yura et al. in order to allow papers of different thickness into the nip and be durable.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 3, 6, 7, 9, & 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, & 12 of copending Application No. 10/805244 in view of Yura et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3, 6, 7, 9, & 13 claim a device as stated in claims 1, 7, & 12 of copending Application No. 10/805244 with the exception of radii of curvature meet the equations $r2 < r1 < r2$ K or a mean pressure of a range between 50 kPa and 250 kPa.

Yura et al. discloses an image forming apparatus that can be in said range and meet said equation Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the device claimed in claims 1, 7, & 12 of copending Application No. 10/805244 with the range and distance as taught by Yura et al. in order to allow papers of different thickness into the nip and be durable.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

14. In response to applicant's arguments that Yura fails to teach a one-piece nip forming member; these arguments have been fully considered but they are not persuasive since the

existence of a secondary nip as formed by roller 18 does not prevent the *fixing* nip, as disclosed in the claims, from being formed by the single piece nip forming member 19, as detailed above in paragraph 2.

15. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. the fixing nip and the second nip be continuous) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Inquiries concerning this, or earlier, communication from the examiner should be directed to Travis M. Reis (571) 272-2249, reached on 8--5 M--F. If unreachable, contact the examiner's supervisor, Diego Gutierrez (571) 272-2245. The fax number for the organization where this application or proceeding is assigned is 703-872-9306. The status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Information for

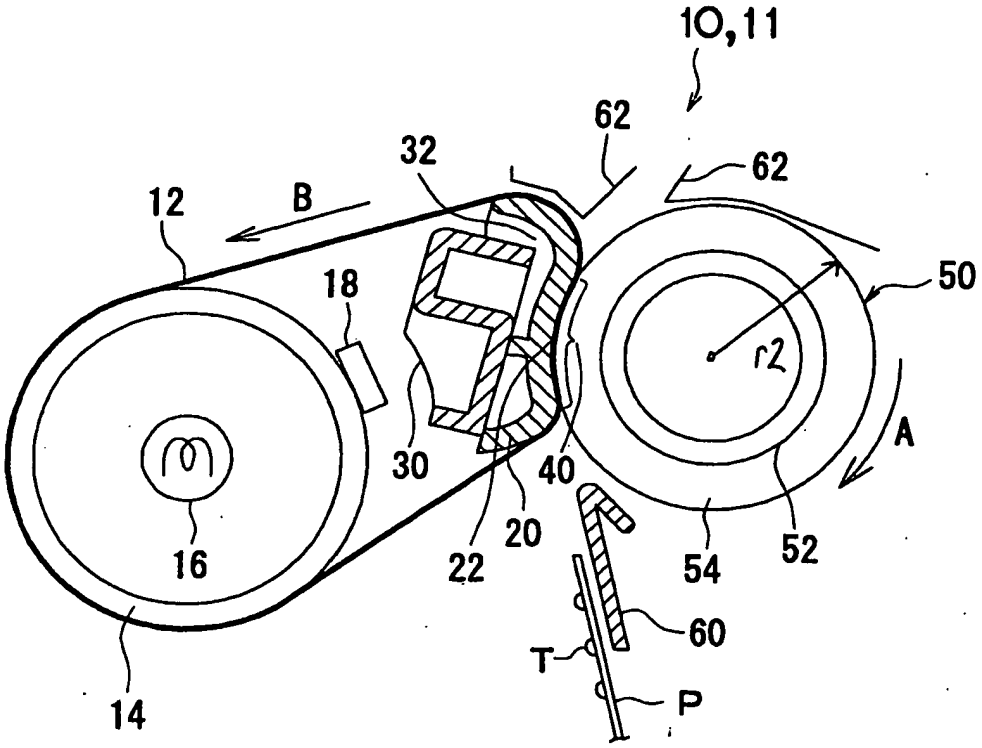
published applications may be obtained from either Private PAIR or Public PAIR, while information for unpublished applications is through Private PAIR only. For more about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) 866-217-9197 (toll-free).

Travis M Reis
Examiner
Art Unit 2859

Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
January 23, 2006

Fig. 1



Approved
TMR 1/17/6